THE STRESSED VOWEL SYSTEM
of Modern West Frisian

The present article is an attempt to systematize the vowels of Modern West Frisian on principles slightly different from those which have been used in the past. Most people agree that the Frisian spelling system as it stands does not give an exact representation of the vowel system of
the language. Dr. Sipma wrote in $1914 \ldots$ the Frisian orthography is very inconsistent, and moreover is often applied with equal inconsistency. ${ }^{1}$ ) And in 1947, in Chapter VI of Ta it Frysk, he points out in greater detail the difficulties of finding a spelling system to match the complicated sound system of the language. It must be remembered that the sound (lîd) is not the letter; and to analyze the sounds is to forget the spelling in favor of a more precise method of classification, that of meaningcontrast. But a correct spelling system can only be based upon a systematic analysis of the sound contrasts of the language: 'It idiael soe wêze: as regel foar elk foneem, d.i. elk bitsjutting-ûnderskiedend lûd, ien teken'. ${ }^{2}$ )
The following are the vowel phones and combinations that occur in stressed syllables in Modern West Frisian, as they are heard by a foreign phonetically trained observer. (A phone may be defined as an unanalyzed speech component, a vocal sound which has not yet been fixed in the sound structure of the language. It is a simple element which is still being considered in terms of its phonetic and acoustic nature, and to which the test of meaning-distinctiveness, or contrast: has not yet been applied. For definitions of the phoneme and phonemic procedure, see such books on linguistics as Leonard Bloomfield' s Language ( 1933), N. Trubetskoy, Grundriss der Phonologie 1939), and Block and Trager Outline of Linguistic Analysis (1942). ${ }^{3}$ ) Following the American procedure, I use brackets ([ ]) to indicate phones and slantlines (//) to indicate phonemes. - Superscript letters (e.g. $\left[\mathrm{o}^{\ominus}\right]$ ) indicate offglide diphthongs ofgeande twaluden-, before vowels they indicate onglide diphthongs -opgeande twaluden. The symbol ^ indicates slight raising of the tongue, ${ }^{\wedge}$ slight lowering of the tongue, : represents length. (- sustained articulatory position).

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Front high [1] [pik] 'pyk', 'chicken': [i:7 [ti:d] 'tiid', 'time';
    close \(\mathrm{i}:\) u \(\mathrm{i}: 47\) 'ieu', 'century'; Ziə [tsiən] 'tsien', 'ten';
[ï̈ך [piö \(]\) 'pjut', 'little person'; [ \(1 \downarrow\) [spilı] 'spjille',
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    'rjocht', 'right, straight'; [io \({ }^{2}\left[1 i_{\partial t}\right]\) ' 1 jocht', 'light'.
\(\underset{\text { Front high }}{\substack{\text { open }}}[\mathrm{I}][\mathrm{pr} t]\) 'pit', 'pit'.
    open
Front mid
    close [ed] [be \(\begin{aligned} & I I] \\ & \text { ] 'beam', 'tree'. }\end{aligned}\)
Front mid \(\varepsilon^{\wedge} 7\) [ \(\left.\mathrm{p} \epsilon^{\wedge} \mathrm{t}\right]\) 'pet': 'cap'; [हir] [beri] 'bij' 'by, at';
    open \(\left.\left[\varepsilon^{v}:\right] \ell_{\varepsilon^{2}}: d\right]\) 'bêd': 'bed'.
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(rounded) [u] [flïzz] 'flues', 'fleece'
Front mid [ \(\ddot{0}]\) [pöt] 'put', 'well, cistern'; [ \(\mathrm{o}:]\) [dö: \(\underline{y}\) ] 'deun',
(rounted) 'miserly':
    [ \(\bar{\partial} \boldsymbol{7}][\mathrm{glö} \partial \mathrm{n}]\) 'gleon', 'hot, glowing'.
Low back [a/ [pak] 'pak', 'packet': La:] [ta:k] 'taek', 'task';
———
    [ai] [laitsjo] 'laitsje', 'laugh'.
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High back [u] [uk] 'tak', 'sharpshooting'; [u:] [lu] 'lad',
(rounded) 'sound'; [ur hurd] 'hoed', 'hat'; [ul] Dui] 'boei',
    'buoy': [upon [codon] 'hodden', 'hats'; [un] [suanonf
Mid back close
(rounded) [o] [bob] 'bon': 'buck'; [o:] [rook] 'rook', 'smell';
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Mid back open
(rounded) [0] [Mot] 'kat', 'cat'; [D:] [stol] 'stock', 'stick';

Dr. Sima's phonemicization of the vocalism of Modern Frisian as presented in Ta it Frysk, Chapter V, distinguishes nine stressed vowel phonemes, phonemic length, falling and rising diphthongs of several sorts; involving $/-ə /$, /-i-/ and $/-\mathrm{u}-/$ ). His examples are listed below in Frisian spelling. I have added phonemic symbols of my own which I trust to not depart from his schematization:

VOWELS § 4

| short: | pym /i/ <br> pit $/ \mathrm{E} / /$ <br> pet $/ \mathrm{e} /$ | nut $/ \mathrm{u} /$ <br> put $/ \mathbf{0} /$ |
| :---: | :---: | :---: |

## DIPHTHONGS

rising diphthongs 4 § 13

$$
\begin{aligned}
\text { stiennen } / i_{F} / & \text { fluezzen } / u_{\mathrm{e}} / \\
\text { beammen } / \mathrm{i}_{\mathrm{a}} / & \text { hodden } / \overline{u_{0}} / \\
& \text { darren } / u_{\mathrm{a}} /
\end{aligned}
$$

## FALLING DIPHTHONGS

(i-eftich heallûd) § 16


| (u-eftich heallûd) § 17 |  |  |  |
| :---: | :---: | :---: | :---: |
| short: | -- | -- |  |
|  |  | -- | $\begin{aligned} & \text { nou /ou/ } \\ & \text { nau / u/ } \end{aligned}$ |
|  |  | -- |  |
| long: | $\begin{aligned} & \text { ieu /i:u/r } \\ & \text { reau/E:u/ } \end{aligned}$ | -- | .-- |
|  |  | -- |  |
|  | -- |  | -- |
| (ə-eftich heallûd) § 11 |  |  |  |
| $\begin{aligned} & \text { bien /io/ } \\ & \text { beam /EP/ } \end{aligned}$ |  | flues / ï gleon / ${ }^{\text {a }}$ | hoed/u $\%$ / doar /od/ |
| PhTHONGS § 18. |  |  |  |
|  | $\underset{\text { moaist } / \mathrm{i}_{\mathrm{a}}{ }^{\text {reau }}}{\text { ren }}$ | $\begin{aligned} & \operatorname{Liuw} / i_{u}^{u} \\ & \text { koai } \end{aligned}$ | $\text { muorte } / u_{0} \mathrm{i} /$ |

Finally, Dr. Sipma indicates the nasalization of vowels in certain circumstances, that is, a following -n- plus $s, f, w, j, l$, and $r$. But he is not clear as to whether nasalization is to be considered a phoneme or not. He says that it is a 'phonological element,' that is, it, has meaningdistinctiveness, (§ 19, p. 57) (But actually, nasalization cannot be phonemic, since its environment-- the conditions determining nasalization or nonnasalization -- is definitely predictable. Nasalization occurs only when followed by -nplus certain consonants, and never when not followed by such consonant groups. Thus, according to the principle of 'complimentary distribution', ${ }^{5}$ ) the vowels with nasalization are nondistinctive submembers --`allophones'-- of the phoneme class of which their non-nasalized counterparts make up the major part. )

To my mind, the chief difficulty arising from Dr. Sipma's schematization concerns the nature of the phonological composition of diphthongs.
Dr.Sipma calls the unaccented element of diphthongs `heallûden' or semi-vowels. ${ }^{6}$ ) This is a term which has been carried over from the earlier days of philology, before languages were conceived of in structural, systematic terms. Its meaning is really quite vague. A definition of a semi-vowel as the second or unstressed element of a diphthong is unsatisfactory since such a definition is one of function only, not of phonemic nature. That is to say, one begins with the diphthong as a concept which itself is defined as a stressed vowel plus an unstressed 'glide'. Then one proceeds to call this glide a semi-vowel. But how does one know it is a semi-vowel and not a semi-consonant? It is my opinion that one cannot know the phonological nature of the 'glide' element until one has analyzed the total distribution of the sound system of the language and decided - which elements are consonants and which vowels - from a phonemic point of view.

If we consider these heallûden as semi-consonants, the Frisian diphthongs can be schematized as vowel plus consonant (V/C), just as recent studies have shown English diphthongs to be best described as phonemically complex rather than compound. The reasons in both languages are ones of expediency: the vowel plus consonant (VC) view of diphthongs works better; that is, it describes the vowel phoneme occurrences in the simplest way and eliminates the writing of contrasts where contrasts do not exist. (e.g., between `beammen' and 'ljecht').
Let us first consider the rounding (/-u-/) and heightening (/-i-/) glides. Instead of /i/ and $/ \mathrm{u} /$, let us use $/ \mathrm{y} /$ and $/ \mathrm{w} /$, to emphasize the semi-consonantal nature of the glide. For the falling diphthongs, we have the following:


The centering glide $/ ə /$ is less complicated since it occurs only as an off-glide. (The question of its occurrence in unaccented syllables is beyond the scope of this paper.) We may also treat this as a semi-consonant. Investigators in English (Trager and Smith) have shown the phonetic similarity and complimentary distribution, hence the phonemic identity of the consonant $/ \mathrm{h}-/$ and the centering off-glide present in some dialects of English. It is suggested that [h] and post-vocalic [ə] are phonetically similar in that the tongue position of both is some-
what mid and central in the mouth (although /h/ is also influenced by the contiguous sound). More importantly, they are complementary in their distribution: /h-/ always occurs before vowels, /-ə/ always after. Let us write $/ \mathrm{h} /$ for $[ə$ ] to indicate the semiconsonantal character of the centering off-glide. We have therefore:

| /ih/ tsien / | /uh/ flues | /uh/ hoed |
| :---: | :---: | :---: |
| /Eh/ beam | /öh/ gleon | /oh/ doar |
| -- |  | -- |



1. Phonology and Grammar of Modern West Frisian (London: 1913), p. 42.
2. Ta it Frysk, I (Ljouwert: 1947), p. 61.
3. Dr. Sipma's short exposition of phonemic analysis (Ta it Frysk, I, 46-8) is excellent for the limited space in which it is contained.
4. In addition to these rising diphthongs, Dr. Sipma, indicates in $\S 15$ a number of forms like rjocht, sjonge, tsjocht; 1ju, tsjuster, wjok; ljacht, ljecht 'dy't minder goed to kennen binne, om't der gjin oar lûd (ienlûd of ôfgeand twalûd) njonken stiet...' -- that is, following the orthography, he takes the ' i ' quality in these words to be a consonant /j/ followed by a simple vowel.
Accordingly, we would be justified in assuming a phonemic contrast to exist between, for example, /'a/ and /ja/ in the pair 'beammen' and 'ljecht'. I hope to show below that such a contrast cannot exist.
5. K.L. Pike. Phonemics (Ann Arbor, 1948).
6. Ta it Frysk, I, 46.
7. H.L. Smith and G.L.Trager, Outline of English Structure (Washington: 1951).
8. I analyze the phone combination [ts] as a unit phoneme, conveniently written $/ \mathrm{c} /$.
9. I write $/ \mathrm{a} /$ here and explain the neutral reduced stress vowel $/ \partial /$ as an allophone of this phoneme.

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